Joint IEA UNEP UNFCCC workshop on energy data for climate policy: Strengthening energy data for an effective Enhanced Transparency Framework.

#### A CASE STUDY OF MALAWI'S GHG EMISSION INVENTORY PROCESS

Presented by

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### OUTLINE

- Malawi: In brief
- 2. National data collection methodologies
- Institutional arrangements and energy data for CC reporting
- 4. Energy data: scope and institutions
- 5. Conclusions and way forward

### 1. Malawi: in brief

- Malawi is a landlocked country in the southern end of the great East African Rift Valley, surrounded by Tanzania,
  Zambia and Mozambique;
- Population is about 18.5 million;
  85% live in the rural area
- Has an agro-based economy;



### 1. Malawi: in brief ...cont'd

- Malawi developed its 1<sup>st</sup> National Energy Policy (NEP) in 2003;
- □ The NEP was revised in 2018;
- Low carbon supported by renewable energy sources and energy efficiency
- Biomass accounts for about 89% of the national energy mix.

### 1. Malawi: in brief ...cont'd

- Malawi has done a total of four GHG emission inventories as part of:
  - US Country Studies;
  - Initial National Communication;
  - Second National Communication;
  - Third National Communication
- GHG inventories were also done as part of INDC and NAMAs

### 2. National data collection methodologies

- Energy data is regularly collected and maintained by Malawi Energy Regulatory Authority (MERA);
- Some energy use data by the population is collected and maintained by National Statistical Office (NSO);
- There are no deliberate data collection activities to collect and maintain databases for GHG inventory purposes;
- Each time there is GHG inventory preparation,
  Environmental Affairs Department (EAD) writes a reference letter requesting institution to provide data to GHG inventory team;
- Data is complemented by some surveys.

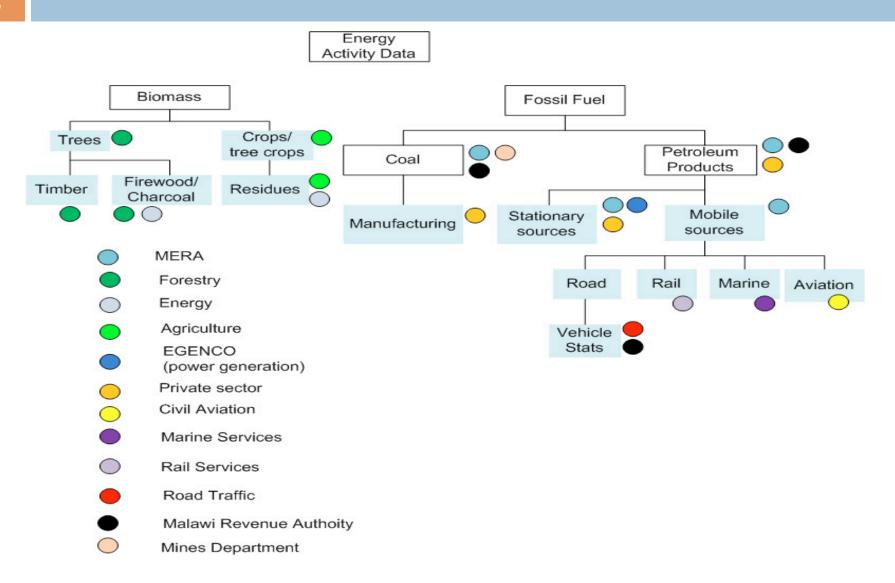
## 2.National data collection methodologies ...cont'd

- EAD made effort to encourage government ministries, departments and agencies (MDAs) to have climate change desk officers as contact persons;
- EAD developed GHG Information System but not been able to operationalise it- issues of MOUs etc;
- Data gaps/challenges- availability, access, format, completeness, consistency, traceability, accuracy? Note: Bigger challenge is on local emission factors (EFs).
- There is need to raise awareness and build capacity at various levels on the need to collect accurate and reliable data for GHG inventory compilation.

# 3. Institutional arrangements around energy datafor CC reporting

- Environmental Affairs Department (EAD) is the country's CC focal point.
- EAD has mandate to prepare national GHG emissions' reports;
- Data sourcess are scattered- private sector, quasi-govt and government department/ministries- Department of Energy Affairs, MERA, Energy Generation Company (EGENCO), private companies etc;
- Currently, data genarating institutions are not well coordinated-silo approach;
- Gaps: Regulations, capacity constraints (human, institutional, financial), unclear boundary responsibities (see Figure 1)
- Private sector unwilling/fearful to release data

### 4. Energy data: scope and institutions



### 5. Conclusions and Way Forward

- Policy and regulations: There is need for specific policy and regulations for GHG related data
  - to support Malawi's CC reporting obligations and research;
  - to enforce/solicit cooperation for data collection;
  - to ensure responsible data use, confidentiality and security of proprietary data.

N.B.: This has come at an opportune when the government is in the process of operationalisation of Access to Information Act.

### 5. Conclusions and Way Forward...cont'd

- Data management systems
  - Data requirement/ formats not clearly defined
  - Data is collected in parallel by several government institutions
  - CC data collection and storage not in place
  - Malawi has other MIS systems which seem to be functional- health, agriculture, DCCMS, MADESA etc

### 5. Conclusions and Way Forward...cont'd

- Capacity building
  - Strengthen data genarating and data management institutions;
  - Build individual capacities on climate change and GHG inventory reporting requirements;
  - Raise awareness on the need to collect, maintain and avail quality energy data.

### **THANK YOU**